Technical Bulletin #60:

Sen Pidao Rice

This bulletin is intended to inform Cambodia HARVEST rice clients on the quality of the Sen Pidao rice variety. It will assist farmers in making the right decision in variety selection, methodology of planting, water management, fertilizer application, and good post-harvest methodologies.

Sen Pidao is one of ten rice varieties released by the Ministry of Agriculture, Forestry and Fisheries to farmers for broader use across the country.

Cambodia HARVEST promotes the use of good agricultural practices to increase the production of high-quality rice and thereby increase the income of rice growers.

Sen Pidao is a high-yield aromatic variety with high market price for milled rice. This is an early, non-photosensitive variety. It can be grown in both dry and wet seasons. The grain looks translucent and long. When cooked, the rice is soft.

The crop cycle of this variety is 110-120 days, the plant height is 95-110 cm, and tillering is 5-20 tillers per hill. There are 110-170 seeds per panicle with a panicle length of 20-30 cm. Sen Pidao is susceptible to Brown Plant Hopper, thrips, stem borer, flooding, and drought. The mean yield is 3.7 ton/ha and potential yield with good agricultural practices and field care can reach 7.5 ton/ha.

Planting and cultivation

Transplanting: the amount of seed used is 30-40 kg per hectare. For strong seedlings, 0.5 kg per 10 m^2 of nursery area should be used. Transplant one to two seedlings per hill, with the seedlings aged 16-20 days.

Direct sowing: the use of drum seeders is promoted by Cambodia HARVEST. This will ensure an even distribution of rice plants in the fields. It also decreases the amount of seed used from 80-100 kg/ha when broadcasted by hand to 60 kg/ha when using the drum seeder.

Land preparation: plow at least two to three times with 15-20 cm depth, harrowing at least two to three times with good land leveling before transplanting and broadcasting.

Water management: after transplanting, the water level should be kept at 5 cm during tillering stage. During the vegetative stage, rice fields should be left dry for two to three days, and then the fields should be irrigated to develop a strong root system and more tillering. From panicle initiation stage to milky grain stage, rice plants regularly need water to increase yields. Water should be drained out of the field one week before harvesting time.

Nutrition management

Urea (46-0-0), DAP (18-46-0), and KCl (0-0-60) are the most economical options.

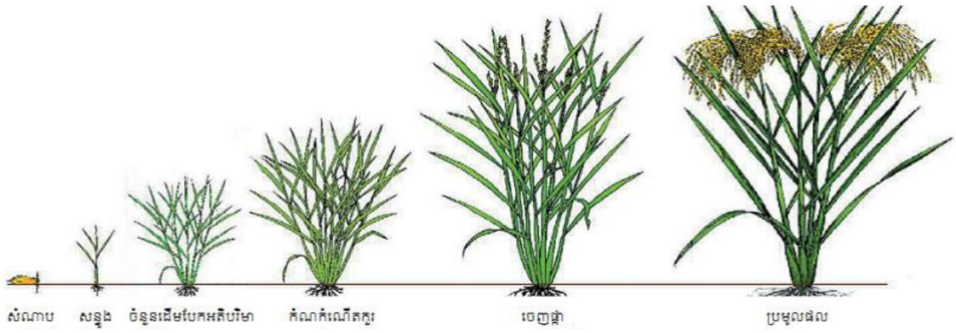
Sen Pidao broadcasted or sown by drum seeder (DAS = days after seeding)

Fertilizer	Basal before sowing	15 DAS	30 DAS	PI – 40 DAS
Urea		2.70 kg/1,000 m^2	5.0 Kg/1,000 m^2	5.0 Kg/1,000 m^2
DAP	4.40 Kg/1,000 m^2			
KCl	1.60 Kg/1,000 m^2			1.60 Kg/1,000 m^2

Sen Pidao transplanted (DAT = days after transplanting)

Fertilizer	Basal before TP	15 DAT	PI 25 DAT
Urea	2.70 kg/1,000 m^2		5.0 Kg/1,000 m^2
DAP	4.40 Kg/1,000 m^2		
KCl	1.60 Kg/1,000 m^2		1.60 Kg/1,000 m^2

For better nutrient management, the Leaf Color Chart can be used to check the real-time nitrogen requirements of the rice plants. To do so, compare the color of the rice leaf and apply N fertilizer more frequently when the leaf color is more yellow than green. Please check with your Cambodia HARVEST technician.



Source: International Rice Research Institute (IRRI)

Harvest

A timely harvest ensures good grain quality and high market value. Some considerations on timing include moisture content, which is ideally between 20 and 25 percent (wet basis). Grains should be firm but not brittle when squeezed between the teeth. Ripe grains per panicle: the crop should be cut when 80-85 percent of the grains are getting dry (yellow-colored). Harvesting also needs to be timed so that threshing can be done as soon as possible after cutting to avoid rewetting and to reduce grain breakage. If the crop has a lot of surface moisture (e.g. from previous rainfall or early in the morning) it is advisable to wait until the surface moisture dries off. The super bag is a farmer-friendly storage bag that allows cereal grains to be safely stored for extended periods (from 6-12 months). Fill the super bag with dried seed (less than 12 percent moisture content) or dry grain (less than 14 percent).

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